

WHAT IS CLAIMED IS:

1. A cathode ray tube, comprising:
 - a glass front panel;
 - a funnel fastened to the panel, the funnel including a neck part and a screen part opposing the neck part, wherein the screen part is fastened to the panel;
 - a fluorescent screen formed on an interior surface of the panel;
 - a shadow mask disposed a predetermined distance from the fluorescent screen;
 - an electron gun coupled to the neck part for emitting electron beams, the electron beams formed of a plurality of electrons;
 - a deflection yoke for deflecting electrons within the electron beams in horizontal and vertical directions, wherein the deflection yoke includes a horizontal deflection coil for horizontally deflecting electrons within the electron beams and a vertical deflection coil for vertically deflecting electrons within the electron beams;
 - a core for reducing loss in the strength of a magnetic field generated by the horizontal and vertical deflection coils, the core including an attaching portion; and
 - a holder for holding and insulating the horizontal and vertical deflection coils, wherein along a cross section perpendicular to an axis of the funnel, a thickness of the attaching portion of the core is different from a thickness of a portion of the core proximate a portion of the funnel fastened to the panel.
2. The cathode ray tube according to claim 1, wherein the thickness of the attaching portion is greater than the thickness of the portion of the core proximate the screen part.
3. The cathode ray tube according to claim 1, wherein the thickness of the portion of the core proximate the screen part is about 3mm to about 6mm.

4. The cathode ray tube according to claim 3, wherein the thickness of the portion of the core proximate the screen part is about 4mm to about 5mm.
5. The cathode ray tube according to claim 3, wherein the thickness of the attaching portion of the core is about 4mm to about 6mm.
6. The cathode ray tube according to claim 1, wherein the thickness of the attaching portion of the core is about 4mm to about 6mm.
7. The cathode ray tube according to claim 1, wherein thickness of the core adjacent the attaching portion is about $\frac{1}{3}$ to about $\frac{2}{3}$ the thickness of the core including the attaching portion.
8. The cathode ray tube according to claim 1, further comprising attachment grooves along an edge portion of the attaching portion.
9. The cathode ray tube according to claim 8, wherein the depth of the attachment grooves is about $\frac{1}{3}$ to about $\frac{2}{3}$ the thickness of the attaching portion of the core between the attaching grooves.
10. The cathode ray tube according to claim 8, wherein an actual depth of the attachment grooves is about 2mm to about 3.5mm.
11. The cathode ray tube according to claim 8, wherein the two attachment grooves are spaced apart from each other by a distance of about 10mm to about 14mm.
12. The cathode ray tube according to claim 1, wherein an exterior surface of the attaching portion of the core between the attachment grooves protrudes from the major exterior surface of the core.
13. The cathode ray tube according to claim 1, wherein the core includes ferrite.

14. The cathode ray tube according to claim 8, wherein a bottom exterior surface of the attachment groove and a surface contactable by a clamp are joined together at a corner having a curvature with a predetermined radius, R.

15. The cathode ray tube according to claim 14, wherein R is between about 1 mm and about 2 mm.

16. The cathode ray tube according to claim 8, wherein the attachment grooves extend to the end portion of the core proximate the screen part.

17. The cathode ray tube according to claim 1, wherein the core weighs between about 160g and about 180g.

18. The cathode ray tube according to claim 1, wherein an interior surface of the funnel has a cross section, perpendicular to the axis of the funnel, that gradually changes from a substantially circular shape at the neck part to a substantially non-circular shape at the screen part.

19. The cathode ray tube according to claim 1, wherein an exterior surface of the funnel has a cross section, perpendicular to the axis of the funnel, that gradually changes from a substantially circular shape at the neck part to a substantially non-circular shape at the screen part.

20. A core of a cathode ray tube, comprising:
a pair of split cores fixable to each other, wherein a first opening and a second opening opposing the first opening are definable by the pair of split cores;
an attaching portion wherein a protruding portion of attaching portion protrudes above an exterior surface of the split cores.

21. The core according to claim 20, further comprising attachment grooves adjacent the attachment portion wherein the thickness of the split cores between the attachment grooves is different than a thickness of a portion of the split cores defining the first opening.

22. The core according to claim 21, wherein the thickness of the split cores between the attachment grooves is greater than a thickness of a portion of the split cores defining the first opening.

23. The core according to claim 20 wherein the thickness of a portion of the split cores defining the first opening is about 3mm to about 6mm.

24. The core according to claim 23, wherein the thickness of a portion of the split cores defining the first opening is about 4mm to about 5mm.

25. The core according to claim 21 wherein the thickness of the split cores between the attachment grooves is about 4mm to about 6mm.